

Overview

This standard is concerned with installing and commissioning of optical fibre cables for Telecoms transmission as per route plans, and testing the effectiveness of joints. It includes coordinating activities like trenching and laying of cables, as well as commissioning Optical Fibre Cables and testing the joints for effective transmission.

Performance criteria

You must be able to:

1. Review and verify optical fibre cabling route requirements and specifications
2. Obtain necessary cable laying, pipe laying, fibre laying and splicing equipment and spares
3. Obtain optical fibre cable and associated connectors and test equipment from sources stated in organisational standards
4. Make the site safe and secure prior to cable installation in line with organisational standards
5. Test new cable for optical continuity in line with organisational standards
6. Verify trenching is completed as per the route plan requirements
7. Lay and join optical fibre using approved methods in line with the optical fibre cable route plan
8. Test optical fibre transmission meets specifications and report any issues for rectification
9. Complete all documentation, in line with organisational standards

Knowledge and understanding

You need to know and understand:

1. The principles of optical transport media and optical fibre cable communication
2. The principles of optical fibre cable construction and selection
3. The main operating characteristics of optical fibre transmission, including refraction, polarization, attenuation, dispersion
4. The different bands in optical fibre and their usability
5. The factors involved in optical fibre transmission signal strength and transmission quality
6. The different functionality of industry standard optical fibre laying and joining equipment
7. The functionality of optical fibre test equipment
8. The target values for optical fibre test results
9. How to interpret optical fibre cable route plans
10. The different types of optical fibre connectors and terminators that can be used and their limitations
11. The escalation matrix for reporting identified incidents
12. The requirements for safe installation and operation of optical fibre and associated equipment
13. The organisation's policies, procedures and standards for installing and commissioning optical fibre transmission cables

Install and commission optical fibre transmission cables

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